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MINICOMPUTER SYSTEM ACQUISITION
WITHIN DOD

STUDY PROJECT REPORT
PNC 76-2

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FORT BELVOIR, VIRGINIA 22060

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DEFENSE SYSTEMS MANAGEMENT COLLEGE

STUDY TITLE:

MINICOMPUTER SYSTEM ACQUISITION WITHIN DOD

STUDY PROJECT GOALS:

To analyze the approval cycle imposed on the procurement of a minicomputer based instrumentation system by Public Law 89-306 (Brooks Bill) with an end goal of recommending approval policy consistent throughout DOD

STUDY REPORT ABSTRACT:

This report outlines the administrative approval process imposed by the Brooks Bill and how each of the military departments has implemented an approval policy. The particular system for which this approval policy was investigated was a minicomputer-based instrumentation system which cost less than \$50,000 included a central processing unit, and was selected competitively. The delegation of approval authority was traced starting with the Brooks Bill through the applicable directives/regulations to the lowest echelon within the weapons system acquisition command within each military department. For the Air Force, this was AFSC, for the Army, DARCOM, and for the Navy, NMC. All military departments delegated authority to these major commands. Only AFSC delegated authority to selected personnel in field units. Once the delegation of approval path was established, the utilization of the path was determined.

Results of (1) establishing the approval cycle and (2) the utilization of it revealed that approval delays were only minimized in AFSC. This was true because the approval authority for the system specified in this report was at field level. Delays for approval in the Army and Navy were significantly greater because the requirements documents had to be submitted to the applicable Command Headquarters. The recommendation was made that all military departments implement approval authority policy similar to that of the Air Force. This would standardize the delegation of approval authority within DOD.

KEY WORDS: minicomputer
acquisition
ADPE

NAME, RANK, SERVICE

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November 1976

MINICOMPUTER SYSTEM ACQUISITION
WITHIN DOD

Study Project Report
Individual Study Program

Defense Systems Management College
Program Management Course
Class 76-2

by

Neil W. Haars
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November 1976

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This study project report represents the views, conclusions and recommendations of the author and does not necessarily reflect the official opinion of the Defense Systems Management College or the Department of Defense.

EXECUTIVE SUMMARY

Purpose: To analyze the approval cycle imposed on the procurement of a minicomputer-based instrumentation system by Public Law 89-306, the Brooks Bill, with the ultimate goal of recommending approval policy consistent throughout DOD. The minicomputer portion of this system cost less than \$50,000, included a central processing unit and was to be competitively procured. This system would be used in the testing and evaluation of a new weapon system. Therefore it was important that this instrumentation system be readily available to applicable engineers/scientists. The approval cycle was traced to the weapon system acquisition command in each military department. This was AFSC for the Air Force, DARCOM for the Army and NMC for the Navy. It was determined that all departments delegated procurement approval authority to their major weapon system acquisition command. Only the Air Force delegated approval authority to designated personnel in its field units. This meant that ADPE procurement could be granted on-site for Air Force acquisitions. In the case of the Army and Navy, the necessary documents not only had to be staffed locally but then had to be forwarded to the appropriate command for approval. This cycle for the Army and Navy was always measured in weeks and sometimes even in months.

Conclusion/Recommendation: The Air Force was the only one that had minimized the approval cycle for a minicomputer-based instrumentation system. Therefore, it was recommended that all other military departments within DOD implement delegation of approval authority policy similar to that of the Air Force.

ACKNOWLEDGEMENTS

The author wishes to express his appreciation to the individuals in the Departments of the Air Force, the Army and the Navy for graciously explaining the Automatic Data Processing environment and procedures in each of their respective departments. Without their assistance, this report would not have been possible.

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SECTION I

INTRODUCTION

Major advances in the computer industry in the last decade (1966 to 1976) and even more so in the last three years have been little short of phenomenal. An excellent example is the common hand-held calculator. In the last 3 to 4 years, prices have been greatly reduced (\$400 to \$60) and at the same time, the performance of these calculators has increased several orders of magnitude. The technology that has made this possible is the same that is fostering the computer technology boom. Scientists and engineers are using computers in areas that were unheard of only a few years ago. One of these areas is that of test instrumentation.

The importance of good testing and evaluation during the acquisition of a new weapon system cannot be overestimated. It is during this relatively low cost phase of the life cycle of the system that marginal or inadequate performance must be ferreted out. This prevents the fielding of systems that will require costly modifications during their operational lifetime. Computers, especially minicomputers, are being used more and more in this testing. These minicomputers are used primarily because (1) they are relatively inexpensive as compared to specially designed digital interfaces and (2) unlike the specially designed interfaces, the minicomputer can be used in support of several projects. That is, when one test is completed

the minicomputer can be configured to support another test. Therefore, because of the importance of good Test and Evaluation (T&E), it is imperative that the minicomputer systems required by T&E personnel be made readily available to them.

A. PURPOSE: The purpose of the research leading to this report was to delineate and subsequently analyze the approval cycle imposed on the procurement of automatic data processing equipment (ADPE) by Public Law 89-306, the Brooks Bill (Appendix A). This was done for each of the three military departments; the Air Force, the Army and the Navy. To accomplish this, the following was done.

1. The approval cycle was established. A "tops-down" approach was used. The delegation of procurement authority was traced to its lowest level within each military department starting with the Brooks Bill itself. This is described in Section IIA, Background.

2. Once the approval cycle was established, the utilization of it was determined. A "bottoms-up" approach was used. The starting point was at the test engineer/scientist level where a data automation requirement (DAR) would usually originate. This requirement was traced up through the approval cycle until it reached the level where procurement could be approved. This is described in Section IIB, Present Situation.

3. An analysis of the data gathered in support of 1 and 2 above was accomplished. Conclusions and recommendations with the expected payoffs were the results of this analysis. The analysis is delineated in Section III.

Section IV, Summary, includes the conclusions, recommendations and payoffs.

B. LIMITATIONS: This report addresses the approval cycle portion of the overall procurement process for an instrumentation system based on a minicomputer. The approval path delineated in subsequent sections of this report is traced into only one Command in each of the military departments. The Command selected was the one responsible for weapon system acquisition. Finally, but very importantly, this report is NOT an evaluation of the Brooks Bill, but only addresses the impact of this Bill on the timeliness and responsiveness with which approval can be obtained for the procurement of a minicomputer-based instrumentation system.

C. DESCRIPTION OF MINICOMPUTER SYSTEM: Rather than attempt to define a minicomputer, an example will be used to establish a common ground. Minicomputer as used in this report refers to a machine on the order of a PDP 11/45 or a HP2100, each with 32k of core memory. This system is assumed to consist of a minicomputer central processing unit (cpu), a magnetic tape drive and a system console. Cost of such a system is approximately \$45,000 to \$47,500. Furthermore, it was assumed that this system would be procured via competitive procurement. In other words, approval was needed for the competitive procurement of an ADPE system that included a cpu and cost less than \$50,000. Since the cost of the system was less than \$50,000, a delegation of procurement authority would not be required from the General Services Administration (GSA).

SECTION II

SITUATION

A. BACKGROUND: In 1965, the Congress of the United States passed Public Law 89-306, Automatic Data Processing Equipment. This Law is enclosed as Appendix A of this report. This Law was an act to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies. Essentially, this Public Law established the Administrator of General Services Administration as the sole provider of ADPE, created a new set of governing policy, guidance rules and regulations, and added an additional time constraint in the ADPE procurement cycle. This constraint was specifically in the approval portion of this cycle. No one in any Federal department or agency could procure ADPE without approval of GSA or an authority so designated by GSA.

The provisions of the Brooks Bill are now incorporated in Title 40 Paragraph 759 of the United States Codes (Reference a). Paragraph 759(b)(2) of this title states that

"The Administrator may delegate to one or more Federal agencies authority to operate automatic data processing equipment pools and automatic data processing centers and to lease, purchase, or maintain individual data processing systems or specific units of equipment, including such equipment used in automatic data processing centers, when such action is determined by the

Administrator to be necessary for the economy and efficiency of operations or when such action is essential to national defense or national security"

It must be realized that in 1965 when the Brooks Bill was approved a minicomputer system of the type being considered in this report was only a twinkle in someones eye. Therefore, the Brooks Bill was really addressing large-scale computer systems which were in-fact physically large and required extensive facilities and personnel for support. Examples of large scale systems are the CDC 7600's used by the Air Force and the Univac 1108's used by the Army.

GSA used the aforementioned provision in the United States Codes to delegate limited procurement authority to DOD. This was done via Federal Property Management Regulation Chapter 101 Paragraph 101-32.403 (Reference b). DOD in-turn redelegated limited authority to its military departments. This delegation was accomplished through DODD 4105.55, Selection and Acquisition of Automatic Data Processing Resources (Reference c). DODD 4105.55 supplemented DODD 5100.40 Responsibilities for the Administration of the Automatic Data Processing Program (Reference d). These directives (1) assigned responsibility for the DOD ADP Program to the ASD(Comptroller) and (2) required the appointment of a senior ADP policy official to administer the DOD ADP Program within the organizational elements under their respective jurisdictions. In each military department, the Assistant Secretary for Financial Management was designated the senior policy official. It must again be realized that these senior officials were originally designated when minicomputers were not in existence .

Each of the military departments has delegated approval authority to subordinate agencies in different ways. For this report, the delegation authority is traced to, and if applicable, through the Command responsible for weapon system acquisition. For the Air Force, the Command was the Air Force Systems Command (AFSC), for the Army, the Development and Readiness Command (DARCOM), and for the Navy, the Naval Material Command (NMC). The delegation of approval authority being traced is that which is required for approval of a competitive selection of an ADPE system costing less than \$50,000 and including a cpu.

DEPARTMENT OF THE AIR FORCE: The Air Force delegated limited approval authority to AFSC via AFR 300-2 Management of Automatic Data Processing Systems (Reference e). Specifically Paragraph 20 delegates approval for competitive selection for ADPE systems costing \$100,000 and less provided that the procurement is funded from RDT&E (3600) appropriations. AFSC in-turn delegated limited approval authority to selected field units. This was done by letter (Reference f) to the applicable organizations. The approval matrices from AFR 300-2 and AFSC/ACD letter are included in Appendix B as Figures B-1 and B-2, respectively. Paragraph 20 of AFR 300-2 supplements Figure B-1. In summary, in the Air Force, limited approval authority has been delegated to field units. Examples of these units are the Air Force Weapons Laboratory, Aeronautical Systems Division, and Advanced Armament Development and Test Center. The complete list of organizations is attached to the referenced letter.

DEPARTMENT OF THE ARMY: The Army delegated limited approval authority to DARCOM via AR 18-1, Management Information Systems, Policies, Objectives, Procedures, and Responsibilities (Reference g). This regulation delegates to DARCOM approval authority up to \$50,000 purchase or annual lease for a system that includes a cpu. The delegation of approval matrix from AR 18-1 is included in Appendix B as Figure B-3. Whereas the Air Force in AFR 300-2 permitted further delegation of approval authority for ADPE purchases, AR 18-1 Paragraph 1-13 prohibits further delegation of this type without HQDA authorization. In summary, the Army has delegated limited authority to DARCOM but has prohibited further delegation for purchase of new ADPE systems.

DEPARTMENT OF THE NAVY: SECNAVINST 5236.1A Specification, Selection and Acquisition of Automatic Data Processing Equipment (ADPE) (Reference h) and OPNAVINST 5236.1 Specification, Selection and Acquisition of Automatic Data Processing Equipment (ADPE) (Reference i) are the instructions which delegate approval authority within the Navy. The Secretary of Navy delegated approval authority at Headquarters Navy level via SECNAVINST 5236.1A. The Chief of Naval Operations (CNO) in-turn delegated limited approval authority to Naval Material Command (NMC) via OPNAVINST 5236.1. The approval matrix from SECNAVINST 5236.1A is included in Appendix B as Figure B-4. OPNAVINST 5236.1 delegated to the Chief of Naval Material Command approval authority for "exclusively scientific" ADPE selection/acquisition actions which are competitive and which do not exceed \$100,000 annual lease or \$400,000 purchase cost. One limitation on this was that non-Federal Supply Schedule acquisition authority is restricted to ADPE with a \$50,000 annual lease/

purchase-less-maintenance cost. In summary, the Navy, like the Army, has delegated some approval authority to its major commands or equivalents. No approval authority for ADPE has been delegated to subordinate agencies.

Figure 1 is a graphic summary of the preceding discussions. This figure shows the document which was used to delegate approval authority from one agency to another.

B. PRESENT SITUATION: The background discussion essentially delineated the ADPE approval cycle as it now exists. The situation to be discussed in this section revolves around the data automation requirement (DAR) for the mini-computer system described in Section I; i.e. costs less than \$50,000 and includes a cpu. The originator of this DAR has determined that he needs this type of system, has justified this need to his commanders, has funding available and all he needs now is approval to submit his request to Procurement. To accomplish all this and to prepare the paperwork necessary for approval, the originator has had to work very closely with the local Data Processing Installation (DPI) Manager. The questions which must be answered are as follows:

1. Who can approve the procurement documents?
2. Where is this approval authority located?
3. How much delay will obtaining the approval cause?

To answer these questions each military department was examined individually.

DEPARTMENT OF THE AIR FORCE: Schematically, the approval process for the specified system is shown in Figure 2. As stated in the limitations, since this system costs less than \$50,000 a delegation of procurement authority (DPA) is not required from GSA. Additionally, examination of Figure B-2 reveals that the Command ADPS Manager can approve the procurement of this system. In the case of AFSC, the Command ADPS Manager is the DPI Manager or the DPI Manager works for him. Hence, the Command ADPS Manager is on-site and since he has responsibility for the local DPI, he has been working with the originator of the DAR. As would be expected, this manager is very knowledgeable of the need from first hand observation and if he is convinced of the validity of the need, approval can be given virtually instantaneously once the required documentation has been prepared. Therefore, in this case, the approval cycle would be measured in minutes.

DEPARTMENT OF THE ARMY: The approval process for the Army is depicted in Figure 3. As before, a DPA is not required. From the figure it can be seen that the approval cannot be given on site. The lowest approval authority in the Army is at major command level. (See Figure B-3). Therefore, the originator of the requirement for ADP resources must submit it to the local DPI Manager who in-turn must submit it to the major command, in this case, DARCOM. According to Reference j, this approval from DARCOM will take between 4 to 12 weeks. Interviews with DARCOM personnel who were responsible for this approval indicated that the vast majority of the requirements for ADP resources were approved within 4 weeks. It can be seen that the approval time will be measured in weeks. Pertinent facts associated with this are

(1) the approval authority is not collocated with the originator of the requirement for ADP resources and (2) the approval authority does not have first hand information regarding this requirement.

DEPARTMENT OF THE NAVY: The Navy approval process is shown in Figure 4.

The system to be procured in this case is categorized by the Navy as an "exclusively scientific action" (ESA). As such, the approval can be granted by the Chief of the Naval Material Command. As in the Army, the approval cannot be granted on site but must be obtained from a higher headquarters. Department of Navy personnel indicated that the average approval time for ESA's of this order of magnitude usually averaged 3 weeks. Therefore, the facts pertinent to the Army case also apply to this Navy case.

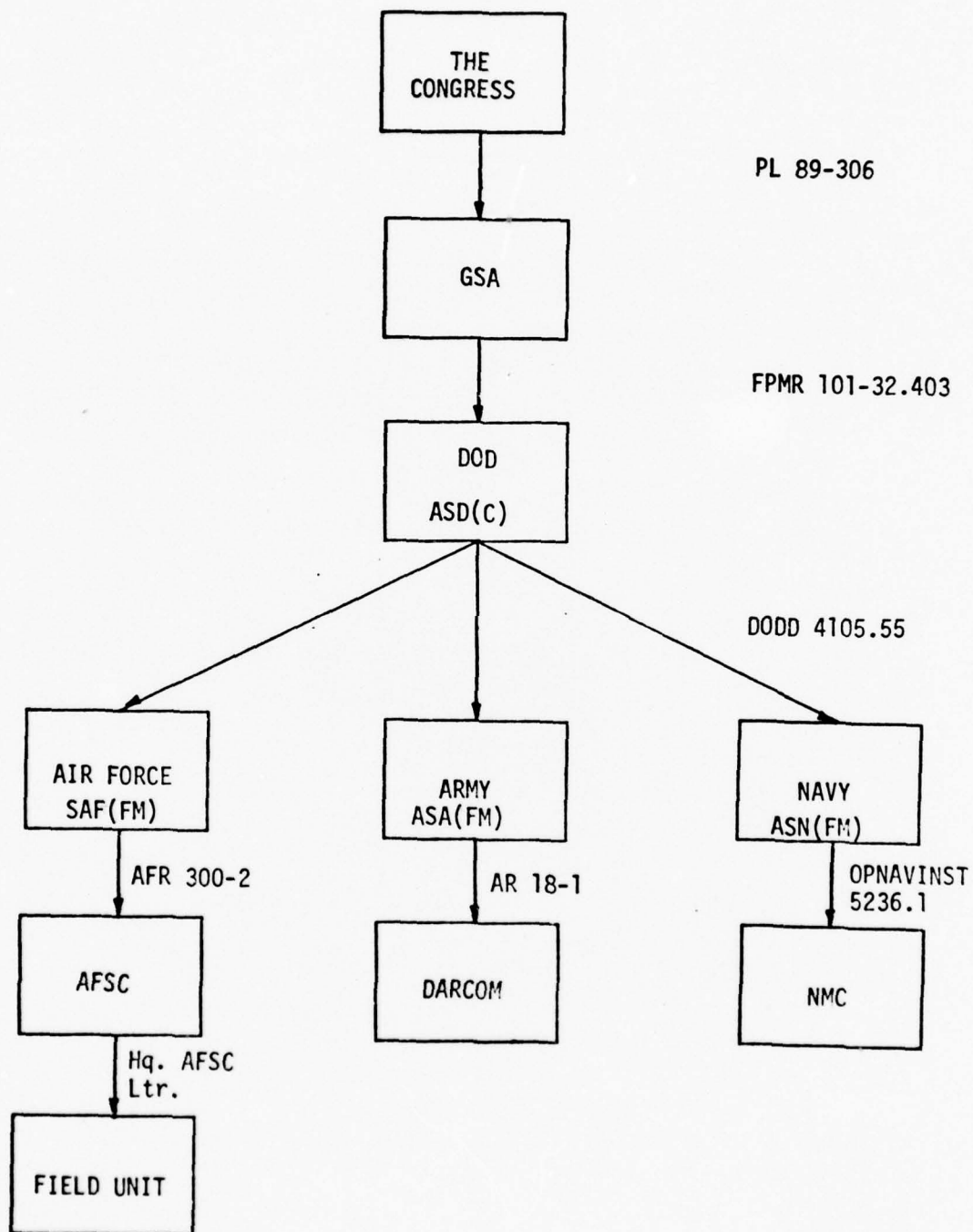


FIGURE 1 DELEGATION OF ADPE APPROVAL AUTHORITY

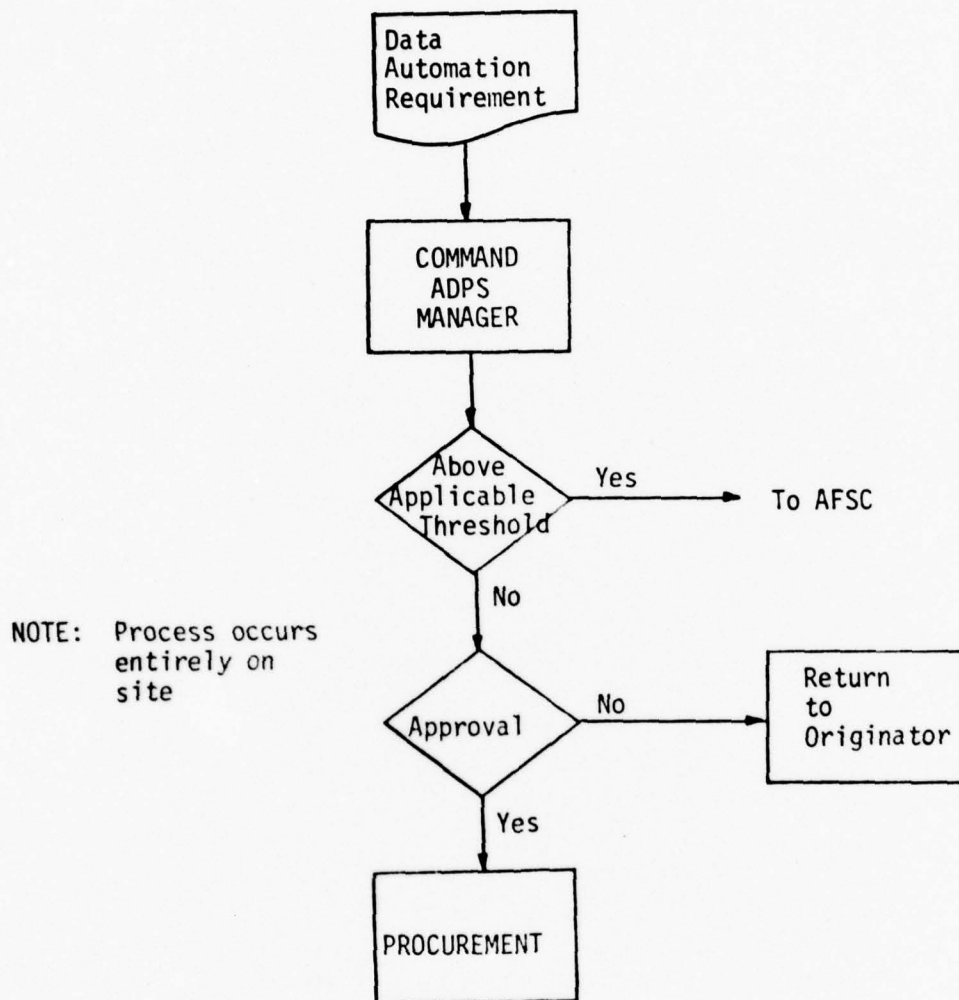


FIGURE 2 AIR FORCE APPROVAL CYCLE

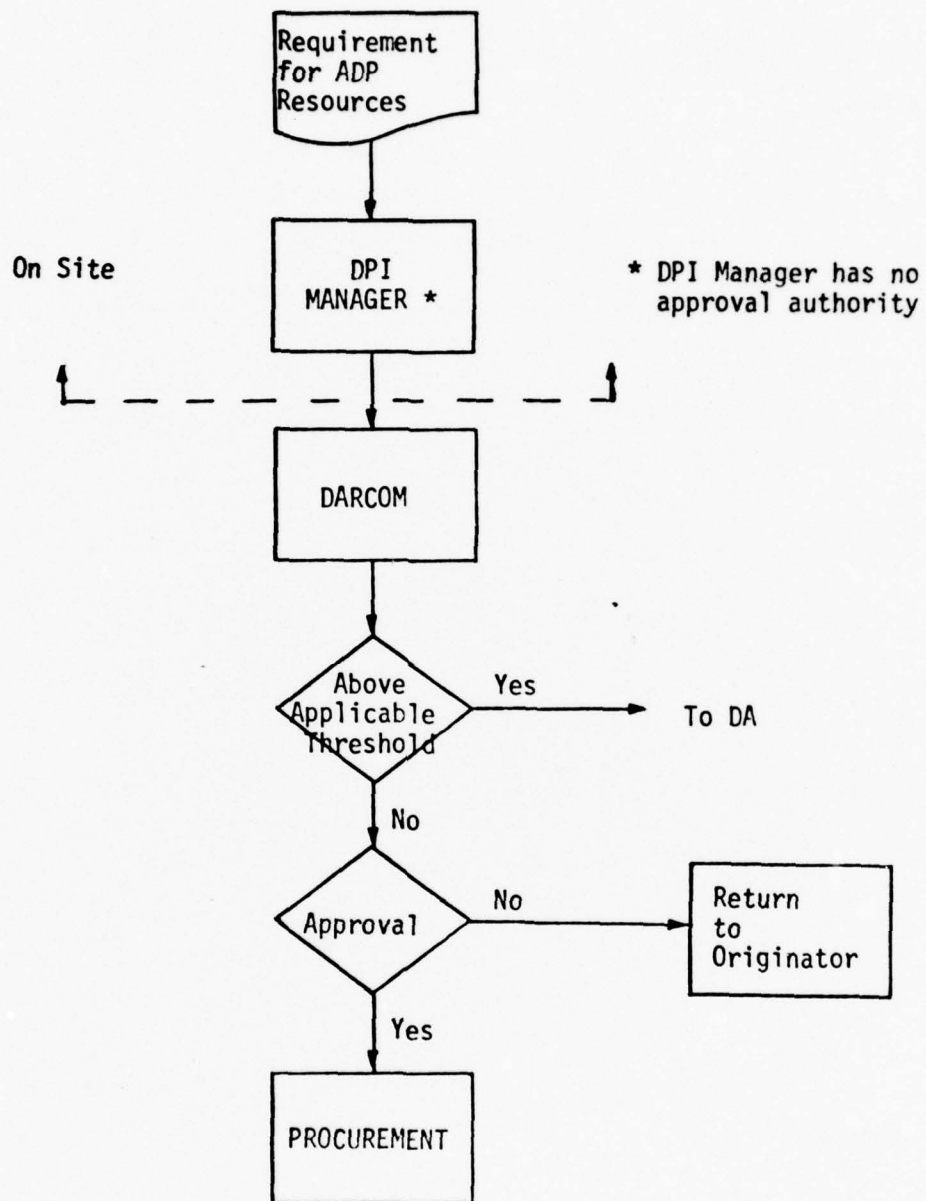


FIGURE 3 ARMY APPROVAL CYCLE

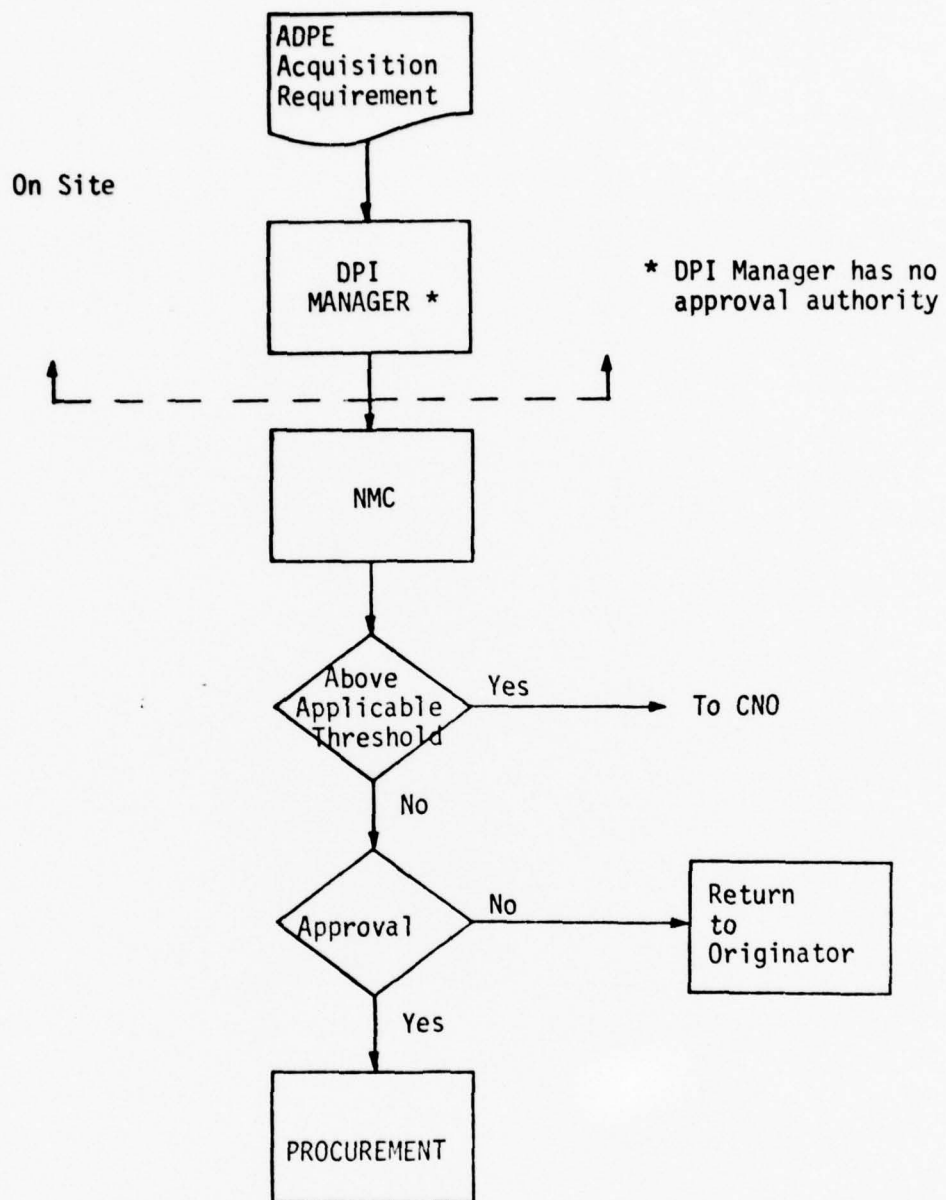


FIGURE 4 NAVY APPROVAL CYCLE

SECTION III

ANALYSIS

In the analysis of (1) the overall ADPE approval cycle, (2) the utilization of the cycle, (3) the governing regulations/instructions, and (4) the interviews with Headquarters Air Force, Army and Navy personnel, several pertinent facts were discovered. These facts are discussed below.

1. Delegation of approval authority, when granted, was usually delegated only for unique ADP systems totally under the pervuew of the official to whom the authority was granted. For example, if an ADP system was standard throughout all agencies in the particular military department, authority to purchase, lease, or modify this system would be retained at the military department level. Conversely, if one DPI had a system totally unique to that DPI, approval authority could be granted to the DPI Manager as was done by AFSC. Additionally, the dollar approval threshold levels usually decreased at each subordinate level. This could be quickly seen from an examination of the approval threshold matrices contained in Appendix B.

2. It was found that the time for approval was directly proportional to the number of agencies between the scientist/engineer with the requirement and the approval authority. This was certainly no surprise, as time is required to get personnel at these agencies up to speed on the specific requirement and also time is required for the additional administrative

processes as well as transmission between applicable agencies. In the case of the Air Force, these were not factors as the approval could be granted on site. The Air Force approval cycle time was measured in minutes because of this. However, Army and Navy approval times were measured in weeks because approval authority wasn't on site. Estimates for approval within the Army were in the range of 4-12 weeks and for the Navy, approximately 3 weeks.

3. The ADP approval cycle does not put money on the ADP requirement. Prior to seeking ADP approval, funding for the requirement must be obtained through a financial approval cycle. That is, any ADP requirement of the kind considered in this report will be scrubbed down at least through TWO approval cycles, one for the funding and one for the ADP procurement approval. Therefore, the engineer/scientist who needs the ADP system is faced with justifying his requirement through two independent approval cycles.

4. The funds which will be used to pay for the ADP system will not come from the GSA ADP fund. This fund was established by the Brooks Bill. Instead, funding will most likely come from instrumentation monies that may be available or more likely, will have to be obtained from reprogramming. If the latter is accomplished, it is envisioned that this ADP requirement will get a very "hard look" during the financial approval cycle discussed above.

5. In all three military departments, it was determined that very

few of the ADP requirements for systems like the one being considered in this report were ever disapproved. At one major Command, only 4 had been disapproved over a three year period. This was also the experience of the other approval authorities.

6. Regardless of the level at which approval was granted, the DPI Manager at the site of the ADP requirement was very heavily involved in the approval cycle. The engineer/scientist who needed the system was not normally knowledgeable of the ADP approval cycle and had to seek expert advice. Hence, he would go to the local DPI Manager. Additionally, the DPI Manager was the contact point for the approval authority located at higher headquarters. It can be seen that the DPI Manager was the person in the middle and as such had to rapidly become the real expert on the ADP requirement. In only one department was the DPI Manager delegated authority to approve the requirement. This department was the Air Force and the specific command was AFSC. The other two military departments had chosen not to delegate any ADPE approval authority to this expert in the field.

7. The delegation of approval authority to AFSC field units has been extremely successful according to AFSC personnel. Initial concern of this delegation was that there would be an immediate proliferation of mini-computer acquisitions. This has not occurred. The number of approvals is running about the same as it was prior to this delegation. This is not surprising because of the constraints imposed by the financial approval cycle on all ADP requirements. Funding must be available before ADP procurement approval can be granted. A special bonus of this delegation to

field units has been the reception of this approval authority by the DPI Managers (Command ADPS Managers) within AFSC. The quality of the requirements documents has in most cases improved. It appears that since the signature of the DPI Manager now has some meaning, more emphasis is being placed on doing a quality job. The real winner in a situation such as this is the major command and, in turn, the applicable military department.

8. The rapid advances in the technology in the computer field are complicating the maintenance of established approval thresholds. A microcomputer is to a minicomputer as a minicomputer is to a large-scale computer. Microcomputers are really starting to find a place in test instrumentation. Cost of a microcomputer is on the order of \$1000. They are considered ADPE according to the definition in Reference c. Therefore, approval for their purchase must be obtained. Very soon, if it isn't already true, the costs associated with the approval cycle will be many times greater than the cost of the hardware involved.

9. If it were decided to delegate approval authority to field units, the administrative framework and personnel would be found to be already in place. The maintenance and accounting of the DPI's are already functioning. Delegation would only require an administrative order.

10. It is common knowledge that headquarters at all levels are being tasked to reduce the number of assigned personnel. To do this, it will be necessary to task the field units to handle more of the workload currently being done at headquarters level. Perhaps, additional delegations of ADPE approval authority would help accomplish this reduction of staffs.

SECTION IV

SUMMARY

A. CONCLUSION: Based on the preceding analysis, it is concluded that the Department of the Air Force is the only one that (1) has minimized the ADP approval cycle for system acquisitions costing less than \$50,000, (2) is making effective use of the existing DPI structure located at field units and (3) is using ADP procurement policies that are staying abreast of the advancing computer technology.

B. RECOMMENDATIONS: It is recommended that all military departments associated with weapon system T&E delegate some approval authority to the local DPI Manager or someone of equal stature at each DPI. It is further recommended that this delegation be of the nature delegated to the AFSC ADPS Managers as described in Figure B-2. Briefly, the approval authority is for ADPE, other than that covered by a Program Management Directive, funded from RDT&E (3600) appropriations for competitive selections costing less than \$50,000 and sole-source acquisitions costing less than \$50,000.

C. EXPECTED PAYOFFS: If these recommendations are implemented, the following payoffs can be expected. These are based on the experience of AFSC.

1. More responsive and shortened approval times for ADPE requirements
2. Reduction in approval cycles required for ADPE; financial and ADP

3. Better utilization of the "real" expert in the field
4. Better control of unique ADP systems at field level
5. Improved quality in requirements documents
6. More flexible approval cycle - microcomputers can be easily integrated into approval cycle
7. More efficient utilization of an administrative structure that already exists
8. Reduction in Headquarters staff workload

APPENDIX A

PUBLIC LAW 89-306

"THE BROOKS BILL"

AUTOMATIC DATA PROCESSING EQUIPMENT

For Legislative History of Act, see p. 3859

PUBLIC LAW 89-306; 79 STAT. 1127

[H. R. 4948]

An Act to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That:

Title I of the Federal Property and Administrative Services Act of 1949 (68 Stat. 377), as amended, is hereby amended by adding a new section to read as follows:

"AUTOMATIC DATA PROCESSING EQUIPMENT

"Sec. 111. (a) The Administrator is authorized and directed to coordinate and provide for the economic and efficient purchase, lease, and maintenance of automatic data processing equipment by Federal agencies.

"(b) (1) Automatic data processing equipment suitable for efficient and effective use by Federal agencies shall be provided by the Administrator through purchase, lease, transfer of equipment from other Federal agencies, or otherwise, and the Administrator is authorized and directed to provide by contract or otherwise for the maintenance and repair of such equipment. In carrying out his responsibilities under this section the Administrator is authorized to transfer automatic data processing equipment between Federal agencies, to provide for joint utilization of such equipment by two or more Federal agencies, and to establish and operate equipment pools and data processing centers for the use of two or more such agencies when necessary for its most efficient and effective utilization.

"(2) The Administrator may delegate to one or more Federal agencies authority to operate automatic data processing equipment pools and automatic data processing centers, and to lease, purchase, or maintain individual automatic data processing systems or specific units of equipment, including such equipment used in automatic data processing pools and automatic data processing centers, when such action is determined by the Administrator to be necessary for the economy and efficiency of operations, or when such action is essential to national defense or national security. The Administrator may delegate to one or more Federal agencies authority to lease, purchase, or maintain automatic data processing equipment to the extent to which he determines such action to be necessary and desirable to allow for the orderly implementation of a program for the utilization of such equipment.

"(c) There is hereby authorized to be established on the books of the Treasury an automatic data processing fund, which shall be available without fiscal year limitation for expenses, including personal services, other costs, and the procurement by lease, purchase, transfer, or otherwise of equipment, maintenance, and repair of such equipment by contract or otherwise, necessary for the efficient coordination, operation, utilization of such equipment by and for Federal agencies: *Provided*, That a report of equipment inventory, utilization, and acquisitions, together with an account of receipts, disbursements, and transfers to miscellaneous receipts, under this authorization shall be made annually in connection with the budget estimates to the Director of the Bureau of the Budget and to the Congress, and the inclusion in appropriation acts of provisions regulating the operation of the automatic data processing fund, or limiting the expenditures therefrom, is hereby authorized.

"(d) There are authorized to be appropriated to said fund such sums as may be required which, together with the value, as determined by the Administrator, of supplies and equipment from time to time transferred to the Administrator, shall constitute the capital of the fund: *Provided*, That said fund shall be credited with (1) advances and reimbursements from available appropriations and funds of any agency (including the General Services Administration), organization, or contractor utilizing such equipment and services rendered them, at rates determined by the Administrator to approximate the costs thereof met by the fund (including depreciation of equipment, provision for accrued leave, and for amortization of installation costs, but excluding, in the determination of rates prior to the fiscal year 1967, such direct operating expenses as may be directly appropriated for, which expenses may be charged to the fund and covered by advances or reimbursements from such direct appropriations) and (2) refunds or recoveries resulting from operations of the fund, including the net proceeds of disposal of excess or surplus personal property and receipts from carriers and others for loss of or damage to property: *Provided further*, That following the close of each fiscal year any net income, after making provisions for prior year losses, if any, shall be transferred to the Treasury of the United States as miscellaneous receipts.

"(e) The proviso following paragraph (4) in section 201(a) of this Act and the provisions of section 602(d) of this Act shall have no application in the administration of this section. No other provision of this Act or any other Act which is inconsistent with the provisions of this section shall be applicable in the administration of this section.

"(f) The Secretary of Commerce is authorized (1) to provide agencies, and the Administrator of General Services in the exercise of the authority delegated in this section, with scientific and technological advisory services relating to automatic data processing and related systems, and (2) to make appropriate recommendations to the President relating to the establishment of uniform Federal automatic data processing standards. The Secretary of Commerce is authorized to undertake the necessary research in the sciences and technologies of automatic data processing computer and related systems, as may be required under provisions of this subsection.

"(g) The authority conferred upon the Administrator and the Secretary of Commerce by this section shall be exercised subject to direction by the President and to fiscal and policy control exercised by the Bureau of the Budget. Authority so conferred upon the Administrator shall not be so construed as to impair or interfere with the determination by agencies of their individual automatic data processing equipment requirements, including the development of specifications for and the selection of the types and configurations of equipment needed. The Administrator shall not interfere with, or attempt to control in any way, the use made of automatic data processing equipment or components thereof by any agency. The Administrator shall provide adequate notice to all agencies and other users concerned with respect to each proposed determination specifically affecting them or the automatic data processing equipment or components used by them. In the absence of mutual agreement between the Administrator and the agency or user concerned, such proposed determinations shall be subject to review and decision by the Bureau of the Budget unless the President otherwise directs."

Approved October 30, 1965.

APPENDIX B

ADPE APPROVAL THRESHOLDS

Threshold (Thousands of \$)	Paragraph (refer to AFR 300-2)	Approval Authority
1. ADPE Approval—Competitive Selection:		
a. Lease (annual costs):		
More than \$100 but not more than \$1 million	12c(1)	HQ USAF/ACD
\$100 and less	15b(2)	MAJCOM/USAF ADPS Manager
b. Purchase (total costs):		
\$3 million and less per year	12c(1)	HQ USAF/ACD
2. ADPE Approval—Sole Source:		
a. Lease (annual costs):		
More than \$50 but not more than \$200	12c(2)	HQ USAF/ACD
\$50 and less per year	15b(1)	MAJCOM/USAF ADPS Manager
b. Purchase (total costs):		
\$500 and less	12c(2)	HQ USAF/ACD
3. ADPE Approval—Reutilization:		
a. Lease (annual costs):		
\$200 and less	12c(6)	HQ USAF/ACD
b. Owned Equipment:		
\$500 and less	12c(6)	HQ USAF/ACD
4. ADPE Approval—EAM:		
a. Lease	15c	MAJCOM/USAF ADPS Manager
b. Purchase	12c	HQ USAF/ACD
c. Expense Item Purchase:		
\$1 and less	15d	MAJCOM/USAF ADPS Manager
5. ADS Development:		
Systems Design and Programming—Organic Manpower:		
Less than 25 man-years	15g	MAJCOM/USAF ADPS Manager
More than 25 but not more than 50 man-years	12c(7)	HQ USAF/ACD
6. ADP Contractual Services:		
More than \$100 but not more than \$500	12c(4)	HQ USAF/ACD
\$100 and less	15a	MAJCOM/USAF ADPS Manager
7. Commercial Software Acquisition:		
a. Purchase (total costs)		
More than \$50 but not more than \$500	12c(5)	HQ USAF/ACD
\$50 and less	15e	MAJCOM/USAF ADPS Manager
b. Lease (annual cost):		
More than \$15 but not more than \$200	12c(5)	HQ USAF/ACD
\$15 and less	15e	MAJCOM/USAF ADPS Manager

FIGURE B-1 AIR FORCE ADP APPROVAL THRESHOLDS

DAR APPROVAL THRESHOLDS FOR AFSC ADPS MANAGERS

<u>Type</u>	<u>Maximum Threshold</u>	<u>Applicable Funds</u>	
		<u>3400</u>	<u>3080</u> <u>3600</u>
ADPE Approval - Competitive			
a. Lease (Annual Costs)	\$50,000	X	X
b. Purchase (Total Costs)	\$50,000		X
ADPE Approval - Sole Source			
a. Lease (Annual Costs)	\$50,000	X	X
b. Purchase (Total Costs)	\$50,000		X
ADS Development			
Systems Design and Programming- Organic Manpower	25 Man-Years	X	X
ADP Contractual Services	\$100,000	X	X
Commercial Software Acquisition			
a. Purchase (Total Cost)	*\$50,000		X
b. Lease (Annual Cost)	*\$15,000	X	X

* Applicable only to packages acquired from GSA authorized ADP Schedule. Otherwise limited to \$10,000 purchase cost or \$7,500 annual lease cost.

FIGURE B-2 AIR FORCE SYSTEMS COMMAND ADP APPROVAL THRESHOLDS

Table 3-1. Selection and Acquisition Approval Authorities ^{1,2}

	ASA (FM)	OCSA MISD	ARSTAF MACOM	Reference
I. SOLE-SOURCE ACQUISITION				Para 3-12
A. Exceeds \$50,000 purchase or annual lease	X			
B. Up to \$50,000 purchase or annual lease			X	
II. GENERAL PURPOSE ADPE ^{3,4}				Paras 3-4, 3-11
A. Central Processing Unit (CPU)				
1. Exceeds \$100,000 purchase or annual lease	X			
2. Up to \$100,000 and exceeds \$50,000 purchase or annual lease		X		
3. Up to \$50,000 purchase or annual lease			X	
B. Other ADPE				
1. Exceeds \$500,000 purchase or \$200,000 annual lease	X			
2. Up to \$500,000 purchase or \$200,000 annual lease			X	
III. S&E AND PROCESS CONTROL ADPE ⁵				Paras 3-4, 3-11
A. More than one CPU or exceeds \$500,000 purchase or \$200,000 annual lease	X			
B. Does not include more than one CPU and does not exceed \$500,000 purchase or \$200,000 annual lease			X	
IV. REUTILIZATION OF GOVERNMENT-OWNED ADPE ⁶				Para 3-6
A. Replace identical (like-type) leased ADPE				
1. CPU		X		
2. Other ADPE ⁷			X	
B. CPU for initial installation of augmentation	X			
V. REUTILIZATION OF LEASED ADPE ⁸				Para 3-12
(Reutilization of leased ADPE for other than its original purpose and use is considered as sole-source procurement; thresholds in I above apply.)				
VI. SOFTWARE COMMERCIALLY AVAILABLE ^{9,10}				Paras 3-7, 3-11
A. General Purpose Software				
1. Exceeds \$50,000 purchase or annual lease		X		
2. Up to \$50,000 purchase or annual lease			X	
B. Application Software				
1. Management Information Systems		X		
2. S&E Process Control Systems				
(a) Exceeds \$50,000 purchase or annual lease		X		
(b) Up to \$50,000 purchase or annual lease			X	
VII. ADP SYSTEMS SUPPORT SERVICES				Para 3-7
A. Initial Requirements				
1. Exceeds \$200,000 annually per requirement	X			
2. Up to \$200,000 annually per requirement ¹¹			X	
B. Follow-on Requirements				
1. Exceeds \$200,000	X			
2. Second- and third-year follow-on identified in initial approval by ASA(FM):				
(a) Not exceeding approved amount by 15%			X	
(b) Exceeding approved amount by 15%	X			
3. Fourth Year Follow-on				
(a) Previously approved by ASA(FM) for 3 years	X			
(b) Previously approved by ARSTAF/MACOM for 3 years. Cumulative (initial through 4th year) requirement exceeds \$200,000	X			
(c) Previously approved by ARSTAF/MACOM for 3 years. Cumulative requirement not exceeding \$200,000			X	

FIGURE B-3 ARMY ADP APPROVAL THRESHOLDS

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	ASA (FM)	OCSA MISD	ARSTAF MACOM	Reference
VIII. ADPE MAINTENANCE SERVICES	-----	-----	X	Paras 3-7, 3-11
IX. ADP SUPPLIES	-----	-----	X	Para 3-19
X. HARDWARE AND SOFTWARE PERFORMANCE MONITORS	-----	X	-----	Paras 3-7, 3-11

Footnotes:

* Compliance with new start (new establishment, initial installation, upgrade, or consolidation) threshold approval requirements of AR 235-5 is prerequisite to exercise of these approval authorities.

* FPMR, ASPR, and APP apply to all ADP procurements. Requirements for Delegation of Procurement Authority (DPA) from GSA for ADPE, ADP services, and supplies are contained in the FPMR.

* Includes ADPE for Management Information Systems, WWMCCS, telecommunications, and IDHS. HQDA retains approval authority for commercially available general purpose ADPE required for tactical and/or mobile systems acquired under provisions of this regulation. In certain situations, DIA selects and requests procurement of IDHS equipment through a specified procurement activity. Include data acquisition devices and PCM. Reutilization of ADPE by ARSTAF/MACOM is subject to the provisions of AR 18-7.

* Selection and approval of ADPE and software associated with Class A-1 systems must be approved by HQDA regardless of these delegations.

* S&E applications must constitute at least 75 percent of all applications.

* Acquisition of general purpose software for use on computers operating Class A systems must be approved by the ARA(s) for the systems.

* ARSTAF/MACOM may redelegate authority up to \$70,000.

* Hardware and software performance monitors are procured by the Federal Computer Performance and Simulation Center.

FIGURE B-3 (cont) ARMY ADP APPROVAL THRESHOLDS

ADPE ACQUISITION THRESHOLD SUMMARY			
Action Level	Equipment Category	Type of Acquisition	
		Competitive/Public Solicitation	Single Source/In House Technical Evaluation
A-NBS	All	Coordinates and assays impact of waivers from applicable FIPS (for which see APPENDIX F)	
B-GSA	1-Available via ADP Schedule (whether so acquired or not)	Procures or delegates procurement authority for actions (including reuse of leased excess) involving: a More than 1 CPU of the same type/model. b Peripheral units wherein the value of the total number of any 1 type/model exceeds \$500,000 purchase cost (whether purchased or leased), or the total quantity exceeds 10. NOTE 2. c Single source actions exceeding \$50,000 annual lease/purchase costs.	
	2-Non-ADP Schedule	Procures or delegates procurement authority for actions exceeding \$50,000 annual lease or purchase less maintenance cost.	
	3-All	Approves use of GSA ADP Fund	
	1-All	Coordinates all referrals to GSA and NBS via ASD/CI	
C-SPO	2-As indicated	a-Approves actions exceeding \$100,000 annual lease/\$400,000 purchase cost.	b-Approves all actions involving CPU or exceeding \$100,000 annual lease/\$400,000 purchase costs. OR potentially involving multi-installations (NOTE 5).
D-CNO, CMC, & DIR DON ADPM (Subject to all of above) & E-CNR (ESA ONLY)	1-CPU (inclg. analog)	Approves actions: a Not exceeding 1 CPU of same type/model, if available via ADP Schedule AND not exceeding \$100,000 annual lease/\$400,000 purchase cost. b Not exceeding \$50,000 annual lease/purchase less maintenance cost if non-ADP Schedule.	ESA only: approves actions not potentially involving multi-installations AND subject to III H, and not exceeding \$50,000 annual lease/\$200,000 purchase cost, if available via ADP Schedule (NOTE 5).
	2-Non-CPU	Approves actions: a Not exceeding a total of 10 peripheral units of same type/model, or \$100,000 annual lease/\$400,000 purchase cost, if available via ADP Schedule. b Not exceeding \$50,000 annual lease/purchase less maintenance cost if non-ADP Schedule.	Approves actions not potentially involving multi-installations AND subject to III H, AND: c Not exceeding a total of 10 peripheral units of same type/model, or \$100,000 annual lease/\$400,000 purchase cost, if available via ADP Schedule (NOTE 5). d Not exceeding \$50,000 annual lease/purchase less maintenance cost if non-ADP Schedule (NOTE 5).
E-CNR, DCM, & DIFNAV-COMPT (Other than ESA)	Non-CPU	1-Approves actions where gross value of incoming ADPE does not exceed \$25,000 annual lease/\$100,000 purchase cost (except as non-ADP Schedule purchase exceeding \$50,000 entails request via SPO for GSA delegation).	2 Same as E-1 (at left), AND not potentially involving multi-installations, AND subject to III H, (NOTE 5).

- Notes:
1. This chart is for convenience of reference ONLY. THE NARRATIVE TEXT CONTROLS.
 2. Maximum Order Limitations in B-1 above may be superseded by other limits in some ADP Schedules.
 3. ADPE SO participates in staffing certain single source actions, and otherwise assists on request.
 4. Direct contact authorized between SSA/ADPE SO on delegated ESA (EXCLUSIVELY SCIENTIFIC ACTIONS) [See II E 3a.]
 5. Single source actions exceeding \$50,000 annual lease/purchase costs require a DPA (Delegation of Procurement Authority) from GSA.

FIGURE B-4 NAVY ADP APPROVAL THRESHOLDS

REFERENCES

- a. Public Law 89-306 (40 United States Code 769)(Public Buildings, Property, and Works)
- b. Public Contracts and Property Management, Code of Federal Regulations, Title 41, Chapter 101, Federal Property Management Regulations, Washington, D.C.: Government Printing Office, 1974
- c. Department of Defense Directive 4105.55, Selection and Acquisition of Automatic Data Processing Resources, 19 May 1972
- d. Department of Defense Directive 5100.40, Responsibilities for the Administration of the Automatic Data Processing Program, 18 May 1970
- e. Air Force Regulation 300-2, Management of Automatic Data Processing Systems, 14 Feb 1975
- f. Air Force Systems Command Letter dtd. 30 April 1976, Subject - Data Automation Requirement (DAR) Approval Authority
- g. Army Regulation 18-1, Management Information Systems Policies, Objectives Procedures, and Responsibilities, 22 Mar 1976
- h. Secretary of Navy Instruction 5236.1A, Specification, Selection and Acquisition of Automatic Data Processing Equipment (ADPE), 30 Apr 1974
- i. Chief of Naval Operations Instruction 5236.1, Specification, Selection and Acquisition of Automatic Data Processing Equipment (ADPE) 25 Feb 1972
- j. Parke, Robert H., Procurement of ADPE in the Army: An Evaluation, Study Project Report, Defense Systems Management College, May 1976